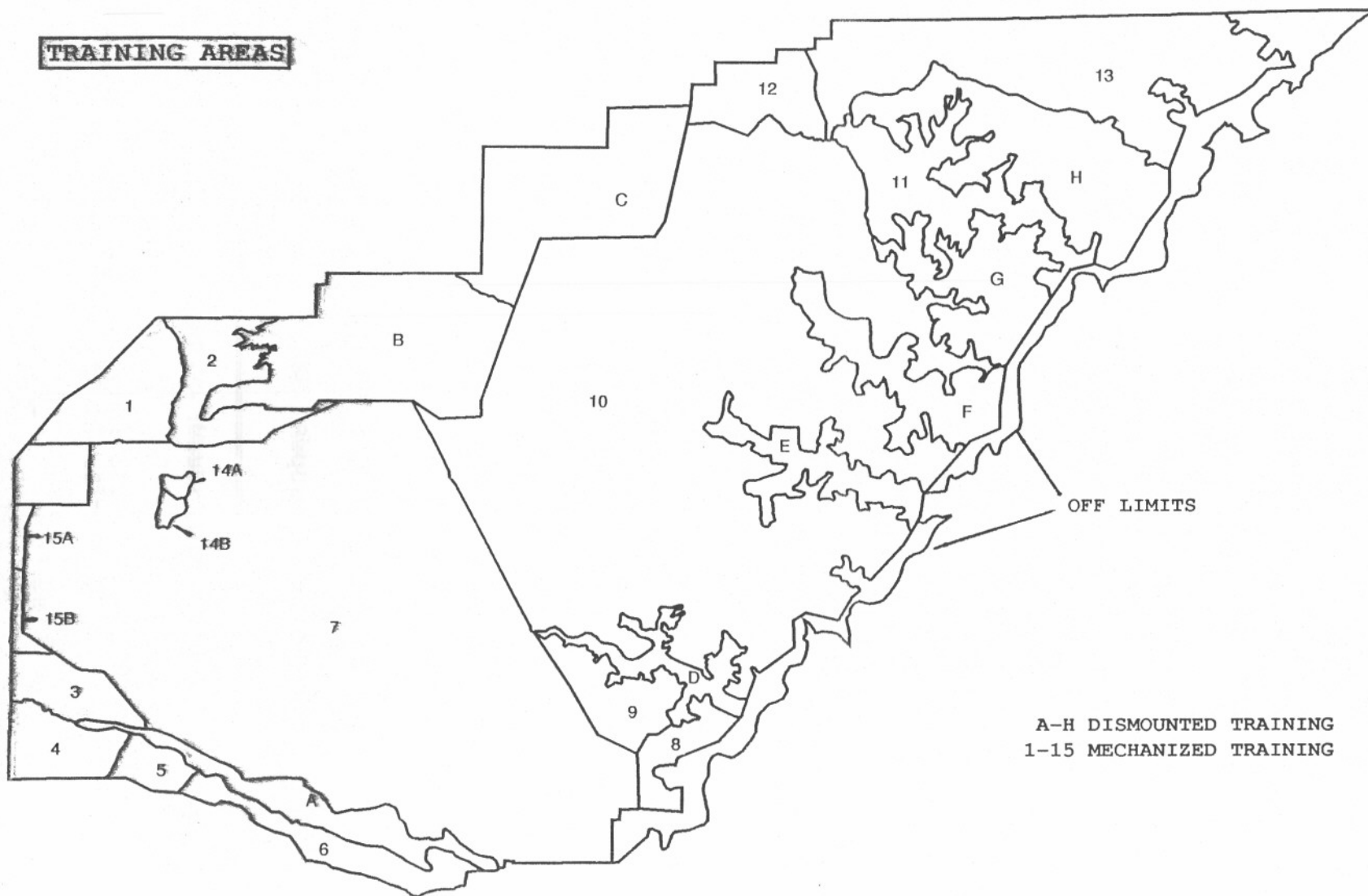


TRAINING AREAS



5000

RECORD OF ENVIRONMENTAL CONSIDERATION

TITLE OF PROPOSED ACTION: Deferment Period Modifications: Pinon Canyon Maneuver Site, Colorado

BRIEF DESCRIPTION OF PROPOSED ACTION: Modify existing holiday deferment period from 15 December - 15 January to 1 December - 5 January annually.

PROPOSED PROJECT DURATION (MONTH/YEAR OF PROPOSED ACTION)

January 1993 - Indefinite

IT HAS BEEN DETERMINED THAT THE PROPOSED ACTION: (CHECK ONE AND FILL IN THE BLANKS)

XXX Is adequately covered in an existing EIS

Entitled: EIS for Training Land Acquisition

and dated: January 1980.

XXX Is adequately covered in an existing EA

Entitled: Resource Management Program Modifications, PCMS

and dated: July 1990.

_____ Qualifies for Categorical Exclusion No. _____, Appendix A, AR 200-2, and no extraordinary circumstances exist as defined in Chapter 4, para 4-3(b)(1) to (6) AR 200-2, as of 23 December 88.

_____ Is exempt from NEPA requirements under the provisions of _____ (cite superseding law).

_____ Requires an EA/EIS. Request requirements from DECAM.
POC _____

XXX Requires Mitigative Measures/Requirements/Conditions (attached).

_____ Requires Environmental Survey for Construction Sites (ESCS), IAW Draft AR 415-15.

Site Category _____ Date Site Visit _____

_____ Requires a Preliminary Assessment Screening (PAS).

Date Site Visit _____

_____ Hazardous Substance Contamination Condition of the Property is Acceptable

_____ Hazardous Substance Contamination Condition of the Property is Not Acceptable

_____ PAS Report (Copy Attached)

MITIGATIVE MEASURES/REQUIREMENTS/CONDITIONS:

Review of this project is based upon current environmental laws, regulations and requirements. Slippage of project schedule, change in the scope of work, or passage of new environmental regulations may require a new review of the project to determine permit requirements or mitigation strategies of unanticipated environmental impacts.

Additional mitigative measures/requirements/conditions are attached.

POC is Vicki McCusker, 579-4828.

Proponent: _____

Approved by: _____

Phone _____ Date _____

Thomas H. Lane
Director, Environmental
Compliance and Management

Prepared by: Vicki L.W. McCusker
Environmental, DECAM

Date 29 Dec 1992

Phone 579-2282 Date 28 Dec 92

Greg A. Carlson
Commander, Fort Carson and
4th I.D. (M)

Date 5 Jan 93

RECORD OF ENVIRONMENTAL CONSIDERATION

Deferment Period Modification; Pinon Canyon Maneuver Site

1. Following consideration of data developed during the twelve year administration and seven year training utilization of the PCMS, it was considered that modification of the holiday deferment period (15 December - 15 January) was justified and prudent given overall management intent and resulting conservation of the resource.

2. As such, individuals which had previously expressed interest in the management of the PCMS and which have participated in the Land Use Technical Advisory Committee (LUTAC) were individually contacted to determine their opinion of the proposal to modify the existing holiday deferment period from 15 December - 15 January to 1 December - 5 January annually. Individuals (Encl 1) were contacted either personally or telephonically by the undersigned on the dates indicated. Discussions with all identified individuals included the following:

a. The purpose of the proposed modification is to realign the existing holiday deferment period to provide for the following:

(1) Consistency with implemented Fort Carson holiday training seasons.

(2) Increased opportunities for non-training impacted recreational utilization during the PCMS Special state deer hunting season (29 November - 12 December).

(3) Increased opportunities for training utilization of the PCMS during the earlier portions of January.

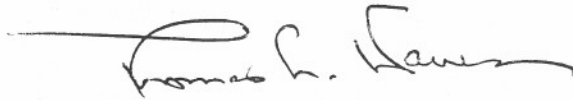
b. Statement of commitment that all previously implemented resource stewardship mitigative strategies and training related requirements employed for utilization of the PCMS (Encl 2) will remain in effect.

c. Statement of intent that the identified proposed modification will be addressed in concert with the requirements of the National Environmental Policy Act (NEPA) within a Record of Environmental Consideration (REC) after completion of personal interviews and identification of individual opinions. [NOTE: The SJA (COL Richardson) concurred with this course of action prior to implementation.]

d. Statement of personal initiation and support of this proposal by the undersigned.

3. All identified individuals contacted offered both their personal concurrence and support of this proposal given

continuation of previously demonstrated resource conservation and stewardship programs.

A handwritten signature in dark ink, appearing to read "Thomas L. Warren". The signature is fluid and cursive, with a long horizontal stroke extending to the left.

THOMAS L. WARREN
Director, Environmental
Compliance and Management

ENVIRONMENTAL ASSESSMENT

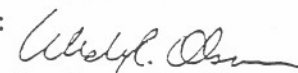
RESOURCE MANAGEMENT PROGRAM MODIFICATIONS, PINON
CANYON MANEUVER SITE (PCMS), COLORADO
JULY 1990

Prepared By:



Thomas L. Warren
Director, Environment,
Energy and Natural Resources

Reviewed By:



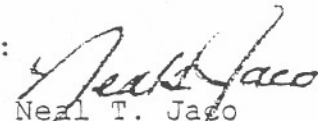
Wesley R. Olsen
LTC, AD
Commander, Pinon Canyon Maneuver Site

Approved By:



Theodore R. Severn
COL, IN
Garrison Commander

Approved By:



Neal T. Jago
Major General, USA
Commanding

Environmental Assessment

Resource Management Program Modifications, Pinon Canyon Maneuver Site (PCMS), Colorado July 1990

1. Purpose and Need for the Proposed Actions.

a. The purpose of these proposed actions is to provide Fort Carson with the management flexibility necessary to maximize the beneficial training utilization of the PCMS without negatively impacting the quality of the environmental resource. As such, this proposal addresses the following.

(1) The subdivision of the PCMS into smaller yet more numerous training areas than the five currently utilized.

(2) The restricted utilization of dismounted military training during the existing deferment periods of 15 December - 15 January (holiday season) and April - June annually and when areas are currently being rested/rotated or otherwise deferred is also proposed.

b. It is considered that operational utilization of the PCMS since August 1985 has demonstrated the capability of the land resources to support the proposed actions as well as the necessity for better alignment of training areas to support the required mission. No additional support facilities will be required to implement these proposed actions as adequate real property resources are currently considered available.

2. Description of the Proposed Actions: The proposed actions consist of two elements. As follows:

a. Element one: Training Area Reorganization.

(1) Element one consists of a reorganization of the existing five (5) management units and existing dismounted training areas into twenty-three (23). The 23 units are divided into fifteen (15) numerical mechanized training and support areas and eight (8) alphabetically identified dismounted (no vehicles) areas respectively. The fifteen (15) numerical areas are further divided into three (3) categories; primary, secondary and support. These categories include two (2) primary mechanized training areas designed for Brigade strength exercises and two (2) secondary mechanized training areas designed for Battalion and less strength exercises. The remaining eleven support areas are divided for utilization as follows: two areas will be utilized with only one adjacent area in use at any one time as support areas and for small unit (Company level and less) training. Attached at Appendix 1 and 2 are the currently utilized and proposed revised training area designations

respectively. Area use designations are attached at Appendix 3. Approximate manpower and equipment requirements for various unit configurations are identified at Appendix 4.

(2) All areas will be rotated two (2) years use followed by two (2) years rest with the additional management flexibility to extend the area-specific (regardless of size) period of rest as necessary to accomplish operational environmental management strategies. As is currently the management philosophy, necessary restoration work will continue to be accomplished during initiation of the 2 year deferment period. Additionally, within the four (4) mechanized training areas, primary use orientations will be internally rotated for each training exercise. Such orientations will be confirmed prior to personnel deployment and training exercise initiation through the review, coordination and approval of subject training plans with PCMS resource management personnel at least thirty (30) days in advance. Area sustainment (maintenance of existing floral and faunal habitat diversities, mitigation/reduction of potential erosional losses and protection of existing cultural/historical resources) versus mission accomplishment will continue to be evaluated daily during all training exercises in order that all area use considerations may be more easily tailored to the requirements/limitations of the land.

(3) This proposed utilization and implementing management scheme has been tested during each of the five (5) training rotations conducted since January 1988 and was determined by both training and resource management personnel to be 100% operationally satisfactory with increased management flexibility resulting in improved accomplishment of the training mission and resource conservation management practices.

(4) Identification of the eight (8) alphabetical dismounted training areas does not represent any change from existing utilization other than to assign an alphabetical identifier to the respective areas. Continued utilization and management of these areas will follow existing requirements/management practices relative no digging and no vehicular activity being allowed at any time.

b. Element two: Dismounted Training Authorized During Deferment Periods.

(1) Element two consists of the modification of existing resource management requirements during the existing no training periods from April - June and 15 December - 15 January annually and for those areas being rested during the remainder of the year. Dismounted training, that is such training utilizing personnel without vehicular equipment being incorporated for any primary tactical purpose other than support/supply (Air Assault, Airborne, Light Infantry, Ranger, Special Operations) would be

allowed during these periods with the following restrictions operational:

- (a) No tracked vehicles will be authorized.
- (b) No vehicle in excess of 5 tons Gross Vehicle Weight (GVW) will be permitted outside the boundaries of the cantonment area.
- (c) All authorized vehicular traffic (i.e., resupply and deployment of personnel to an assembly area) is restricted to designated roads and/or trails as identified by PCMS resource management personnel. No vehicular cross country movement will be permitted at any time by training personnel; with the exception of emergency response.
- (d) Only vehicles within the High Mobility Multipurpose Wheeled Vehicle (HMMWV) class or under 1.5 tons GVW are permitted off the Main Service Supply Routes (MSR's) and are additionally restricted to designated roads and/or trails as identified by PCMS resource management personnel. No cross country movement will be permitted.
- (e) The number of support vehicles authorized for these exercises are limited as follows. Battalion strength exercises will not exceed fifty (50) vehicles and Company strength exercises will not exceed twelve (12) vehicles. These vehicles are normally of the 1.0 to 1.5 tons GVW class and will not play an active role within the training exercise beyond the scope of providing for personnel and supply movements. Given existing training doctrines, these exercises will normally be conducted by smaller sized units utilizing less than an average of 132 personnel. In these instances, authorized vehicle utilization will not exceed a total of twelve (12).
- (f) All primary resupply and refueling operations will be confined to the MSRs and not within 500 meters of any drainage, water course or standing body of water.
- (g) Only excavations to provide for individual fighting positions (i.e. foxholes) and personal sanitation (i.e. cat holes) will be authorized with pre-approval of authorized locations by PCMS resource management personnel required. All such excavations must be reclaimed prior to mission completion. The no digging policy in the eight (8) alphabetically identified areas will continue without exception. Oversight control will be maintained by requiring site approval for all such excavations prior to training mission implementation.
- (h) Utilization of support aircraft (helicopter and fixed wing) during these proposed training periods will be limited as to locale of authorized activity and quantity of

equipment employed. Identification and authorization for utilization of such equipment will be required prior to training mission implementation.

(2) As previously identified within paragraph 2.a.(2) above, personnel desiring to utilize the PCMS during these periods, as is the requirement for all existing utilization, will be required to submit their training plan to PCMS resource management personnel at least 30 days in advance for review, identification of utilization stipulations and other necessary modification prior to implementation. All limitations/restrictions identified during this review process will be strictly adhered to by all personnel training at the site with enforcement provided concurrently by PCMS training unit and resource management personnel.

c. The PCMS resource management program to date has been considered successful due to the consistently significant interaction of utilizing military and resource management personnel prior to, during and after each training rotation. This mutually beneficial interaction will continue with implementation of the above described actions as an addition to those resource and training management strategies currently operational. Additionally, as has been the practice during previous training rotations, training mission curtailment will result whenever weather conditions dictate, as in the case of excessive precipitation, as determined by PCMS resource management personnel in coordination with the training unit Commander.

d. The PCMS resource management program and the operations accomplished relative same are the responsibility and at the direction of the Fort Carson Installation Commander. As stated in the EIS for Training Land Acquisition dated 1980, the Commander is supported in the accomplishment of these responsibilities by a unique assemblage of federal and state management agencies as well as the general public. The PCMS Land Use Technical Advisory Committee (LUTAC), as this assemblage is referred to, review and make recommended modifications to the resource management strategies implemented at the PCMS. Direct management program implementation is administered by the Commander, PCMS and the Director, Environment, Energy and Natural Resources [or designated representative(s)] through their respective staffs and cooperating/support agreement Inter-Service activities. As identified elsewhere within this document, "PCMS resource management personnel" are considered as primarily the Commander, PCMS and Director, EENR. Necessary coordination between diverse staff personnel and other members of the LUTAC is the responsibility of these two individuals.

3. Alternatives Considered:

a. Element one. Training Area Reorganization.

(1) During the operational utilization period of six (6) years (1983-1989), several alternatives to the proposed twenty-three (23) training area reorganization had been considered and evaluated. However, due to the existing topographical relief, training mission requirements, acreage and environmental management limitations, none of the previously evaluated orientations were considered as operationally feasible as the proposed alignment.

(2) Implementation of the proposed reorganization is considered as an internal management initiative resulting in improved flexibility and increased control over how and where specific training activities are accomplished while retaining the originally implemented premise of resting/rotating each area at least two (2) years within every five. With implementation of this proposal, the rest/rotation factor for these areas will increase to two years of rest within every four (4) and may be extended when necessary and as has occurred during the evaluation of this proposal (implemented to document the effectiveness of and compliance with the stipulation) in order to accomplish necessary resource management strategies.

(3) The no action alternative specifically for this element would result in retention of the two years rest within every five years rest/rotation management scheme as well as the currently identified five (5) management units. Continuation of this scheme provides for incremental rest periods of one year followed by three years of use rather than two continuous years of rest (i.e. mechanized training is not allowed) followed by two years of utilization as would be accomplished within the proposed action.

b. Element two. Dismounted Training Authorized During Deferment Periods.

(1) Existing land uses, environmental management limitations, considered resource capabilities and potentialities for improved/increased site utilization/resource conservation were each extensively evaluated over the past six years. Consideration was given to all operational requirements and resource limitations prior to completing evaluations of this proposal. It is considered that identified operational stipulations [paragraphs 2b(1)(a-h) above] coupled with existing and ongoing resource and training management strategies will provide for continued resource conservation while enhancing mission accomplishment and training site utilization. These considerations have basis within the following:

(a) With any utilization as intensive as the accomplishment of military training, resource impacts are inevitable. However, successful integration of a scientifically based management scheme will often offset (mitigate) these potential impacts thereby conserving the resource and providing for its continued beneficial utilization. Both of these conditions are considered to have resulted at the PCMS.

(b) Research and scientific data acquisition efforts accomplished at the PCMS since 1983 are well documented. Resource impacts, both positive and negative have occurred. Data generated thus far details several conclusions to include the following.

(1) As a result of federal ownership and the concurrent cessation of livestock grazing activities, vegetative communities have been allowed to reestablish themselves either through natural or mechanical means. Wildlife populations have either remained constant at 1983 baseline levels or have increased. Erosional losses have been reduced through natural revegetative and mechanical means (construction of erosion control structures and bank sloping). Cultural/historical/architectural resources have been identified, documented, stabilized and/or recovered as necessary in order to protect these unique remnants of the past. Vast networks of scientific monitoring equipment have been established to document training related influences on the air, noise and water resources.

(2) The accomplishment of military training activities at the PCMS have resulted in resource "impacts" as related to vegetative changes in species composition (decreased perennials versus increased annuals) in select geographical areas; short term increases in both air (fugitive dust) and noise related concerns as well as documented short-term behavioral changes of certain wildlife species (pronghorn, mule deer and raptorial avifauna). However, data generated to date by members of the LUTAC, supporting state and federal resource management agencies and PCMS resource management personnel has not identified any quantitative significance to these impacts as related to total ecosystem or specific resource degradation.

(c) Indeed, volumes of scientific data have been generated relative the environmental resources present on the PCMS. It is considered that, these published professional manuscripts, theses and dissertations have greatly benefitted both PCMS management efforts and the ecological sciences as well. Additionally, due to the unique nature of the interactive management approach operational on the PCMS (generate baseline data, monitor changes and implement required management modifications to both mission and resource conservation each in a mutually beneficial manner) the Department of Army in general,

has implemented modified PCMS based management scenarios at other Installations thereby potentially increasing resource stewardship on an international level.

(d) In general, the long term impacts of military training activity on the total environmental resource is not known. However, certain impacts to either individuals, populations or communities may be scientifically predicted dependent upon many factors to include: intensity of resource utilization, precipitation, impact mitigation, educational involvement and generalized management program impact (success or failure). Vegetative habitats will primarily become the limiting factor within the definition of these impacts as resource utilization continues. Timing of resource utilization may or may not result in any impact; either of short or long-term duration. Implementation of this proposal would provide for necessary evaluation of these potential impacts.

(e) As is the management philosophy operational at the PCMS, monitoring and evaluation (scientific data retrieval) will continue for the duration of the Department of Army's stewardship responsibility for these resources. Only through the continuation of these activities will responsible resource management personnel and the general public be able to ascertain the validity of this management approach.

(2) The no action alternative specifically for this element would result in a continuation of the existing deferment periods without any training utilization being authorized or permitted.

c. In general, it is considered that the no action alternatives for either element identified above would result in continuation of considered inadequate management flexibility, decreased training site utilization below its potential resource carrying capacity and potential increased training costs relative accomplishment of these activities at a facility remote from the PCMS.

4. Affected Environment.

The potential environmental resources affected by this proposed action have been previously identified within the three volume Environmental Impact Statement for Land Acquisition (EIS) dated August 1980 and numerous other technical/research reports completed since 1983. Therefore, they will not be elaborated upon within this document. However, as with any utilization of the resource, there are potential impacts, either positive or negative, which can be anticipated and hopefully exploited or mitigated respectively. These proposed actions are no different.

5. Environmental Impacts of the Proposed Actions.

a. Implementation of the realignment of the training areas is not considered to result in any long or short-term adverse impacts to the resource. However, beneficial impacts are considered to result through this proposed implementation. As the map at Appendix 2 details, all boundary designations have been identified along considered clearly definable geographical features (i.e., roads, trails, canyons, arroyos, etc.). Such designations coupled with the completion of required pre-training briefings conducted by management/training area personnel and provision of adequate quantities of training area maps to those individuals involved should limit instances of accidental trespass thereby reducing potential impacts associated with these activities. Additionally, revised training area designations will facilitate implemented rest and rotation strategies through simplified identification of existing boundaries and smaller yet more numerous areas which may be rested/rotated while supporting the resource conservation and training missions.

b. In consideration of the implementation of the dismounted training during the deferment periods option, it is likewise considered that environmental impacts will be extremely minimal or altogether nonexistent. Discounting historical non-training related periods of utilization during these deferment periods, it is recognized that by changing these periods from "non-available for training utilization" to "available for limited and specified training utilization" that this does within itself represent a potential impact to the resource base. However, these impacts are considered to be insignificant due to the previously identified management controls placed upon this training utilization.

c. Management oversight control of these periods of training utilization will continue to be evaluated daily during the training exercise through the active and personal interaction of both resource management and military training personnel. Designation, field identification and enforcement of detailed restrictions germane to this resource management program will be continuously promulgated through this interaction thereby reducing potential impacts to areas of critical concern such as nesting sites of raptorial and non-raptorial birds, big game fawning areas and vegetated tracts undergoing habitat restoration efforts. Additionally, minimization of impacts related to air and noise pollution, water quality, cultural resources, expenditure of energy resources and socioeconomic concerns of the region are likewise considered to result because of these management efforts.

d. As has been the past and enduring philosophy of Fort Carson, responsible personnel will continue to develop and implement environmental and natural resource management

strategies for the PCMS through direct consultation and cooperation with the Land Use Technical Advisory Committee (LUTAC) and other interested members of the general public. In concert with the original EIS for Land Acquisition, it remains the intention of this Command to initiate/continue environmental research which specifically addresses the affects of this proposal while developing mitigation measures for management implementation (if necessary).

e. Therefore, given the previously identified stipulations and requirements considered in respect of in excess of seven years of management data specifically related to the natural resources of the PCMS and the demonstrated stewardship of those resources by utilizing personnel, it is not considered that the accomplishment of dismounted training during the previously identified deferment periods will result in any significant impact to the quality of the environment or any irretrievable commitment or loss of available resources.

6. As is detailed in Public Law 97-99, Congress directed the Secretary of the Army to adhere and accomplish all of the mitigation measures and commitments published in the EIS for Land Acquisition. It is well documented that Fort Carson has implemented resource and training area utilization management strategies which have far exceeded those commitments in regards to continued resource conservation. The management program implemented on the PCMS is both a publicly accepted and award recognized resource conservation effort of international significance.

7. While the intent of this environmental review document (Environmental Assessment) is to address modifications to two mitigative commitments made within the original EIS, it is likewise the intent of this document that it be considered as supplemental to the original EIS and therefore made a part of those commitments. Justification for this opinion has basis in the many years of site resource utilization and continued Department of the Army commitment to manage and conserve these resources in perpetuity for the accomplishment of the military training mission and resource stewardship.

8. Listing of Agencies, Persons and Publications Consulted:

a. Environmental Impact Statement for Land Acquisition; Volumes I, II and III, August 1980.

b. Ms. Mary Barber; Ms. Patricia Denham; Mr. Allan Pfister; Mr. Gary Belew; Mr. Steve Emmons, Mr. Chris Bandy and Mr. Nelson Kelm; Environment, Energy and Natural Resource, Directorate of Engineering and Housing, Fort Carson, Colorado.

c. Mr. Eric Gese; Mr. Tom Gerlach; Mr. Dan Sharps; Mr. Bob Bramblett, Mr. Bruce Rosenlund and Mr. Max Canestorp; U.S. Fish and Wildlife Service; PCMS, Colorado.

d. Mr. Steve Chomko; Interagency Archaeological Services, National Park Service; Denver, Colorado.

e. Members of PCMS Steering Committee: LTC Wes Olsen, Cdr, PCMS; LTC Tom Barnum, DPTM PCMS; LTC Robert Boonstoppel, SJA and CPT Robert McKinney, PAO; Fort Carson, Colorado.

f. Members of the PCMS Land Use Technical Advisory Committee (LUTAC): S. Turner; G. Gyurman; J. Gyurman; D. Cain; S. Barron; K. Lutz; B. Watson; C. Thomason; L. Williams; D. Davidson; L. Sommerfield; T. Smith; L. Fisher; W. Loudon; T. Stephenson; N. Koch; C. Graves; R. Wiley and G. Deahl.

g. Mr. Paul von Guerard; Water Resources Division, U.S. Geological Survey; Pueblo, Colorado.

h. Dr. Michael Vaughan; Virginia Cooperative Wildlife Research Unit; Blacksburg, Virginia.

i. Dr. Kurt Fausch and Dr. Robert Shaw; Colorado State University; Fort Collins, Colorado.

j. Dr. David Andersen; University of Wisconsin; Madison, Wisconsin.

k. Dr. Vic Diersing; U.S. Army Corps of Engineers Construction Engineering Research Laboratory; Champaign, Illinois.

l. FM 7 - 8; The Infantry Platoon and Squad (Infantry, Airborne, Air Assault and Ranger); 31 December 1980.

m. FM 7 - 20; The Infantry Battalion (Infantry, Airborne and Air Assault); 28 December 1984.

n. D. E. Andersen and B.D. Rosenlund, 1990; Fish and Wildlife Management Recommendations: Pinon Canyon Maneuver Site; Unpublished. rep. 58 pp.

o. R.B. Shaw and V.E.Diersing; In Review, Impact of two years of tracked vehicular training on the vegetation at the U.S. Army's Pinon Canyon Maneuver Site, CO; J. Envir. Quality.

p. Nick F. Koch, Soil Conservation Service; U.S. Department of Agriculture, La Junta, Colorado.

- q. D.E. Andersen, O.J. Rongstad, and W.R. Mytton; 1989. Response of nesting red-tailed hawks to helicopter over flights. The Condor. 91:296-299.
- r. D.E. Andersen and O.J. Rongstad, 1989. Home-range estimates of red-tailed hawks based on random and systematic relations. J. Wildlife Management, 53:802-807.
- s. E.M. Gese, O.J. Rongstad, and W.R. Mytton, 1989. Changes in coyote movements due to military activity. J. Wildlife Management, 53:334-339.
- t. E.M. Gese, O.J. Rongstad, and W.R. Mytton, 1989. Population dynamics of coyotes in southeastern Colorado. J. Wildlife Management, 53:174-181.
- u. E.M. Gese, O.J. Rongstad, and W.R. Mytton, 1988. Home range and habitat use of coyotes in southeastern Colorado. J. Wildlife Management, 52; 640-646.
- v. E.M. Gese, O.J. Rongstad, and W.R. Mytton, 1988. Relationship between coyote group size and diet in southeastern Colorado. J. Wildlife Management, 52: 647-653.
- w. O.J. Rongstad, T.R. Larion, and D.E. Andersen, 1989. Final Report: Ecology of swift fox on the Pinon Canyon Maneuver Site, Colorado. Unpublished Management Report. University of Wisconsin, Madison, 21 pp.
- x. T.R. Stephenson, 1988. Mammalian prey selection by a captive bobcat. The Southwestern Naturalist 33: 104-105.
- y. D.E. Andersen and O.J. Rongstad, 1989. Management and Final Report: Birds of prey on the Pinon Canyon Maneuver Site, Colorado. Unpublished Management Report, University of Wisconsin, Madison, 67 pp.
- z. K.D. Fausch, D.L. Miller, B.D. Rosenlund, and L.D. Zuckerman, 1985. Aquatic organisms and habitat of the Purgatoire River and tributaries, U.S. Army, Pinon Canyon Maneuver Site, Colorado. Unpublished Management Report, U.S. Fish and Wildlife Service, Golden, Colorado, 76 pp.
- aa. T.R. Stephenson, 1989. Mule deer response to military activity in southeastern Colorado. M.S. Thesis. Virginia Polytechnic Institute and State University, Blacksburg, Virginia, 82 pp.
- bb. D.E. Sharps, 1988. Annual FWS habitat improvement report, Pinon Canyon Maneuver Site, Colorado. Unpublished Management Report. U.S. Fish and Wildlife Service, Golden, Colorado, 17 pp.

cc. R.B. Shaw, S.L. Anderson, K.A. Schultz and V.E. Diersing, 1989. Plant communities, ecological checklist, and species list for the U.S. Army Pinon Canyon Maneuver Site, Colorado. Science Series No. 37, Colorado State University, Fort Collins, 71 pp.

dd. R.B. Shaw and V.E. Diersing, 1989. Allowable use estimates for tracked vehicular training on Pinon Canyon Maneuver Site, Colorado. Environmental Management, 13:773-782.

ee. R.B. Shaw, S.L. Andersen, K.A. Schulz, and V.E. Diersing, 1989. Floral inventory for the U.S. Army Pinon Canyon Maneuver Site, Colorado. Phytologia, 67:1-12.

ff. R.R. Hinchman, and W.D. Severinghaus, 1989. Rehabilitation of military training areas damaged by tracked vehicles at Fort Carson, Colorado. U.S. Army Corps of Engineers, Construction Engineering Research Laboratory, Interim Report, Champaign, Illinois, 44 pp.

**PINON CANYON
MANEUVER SITE**

LEGEND

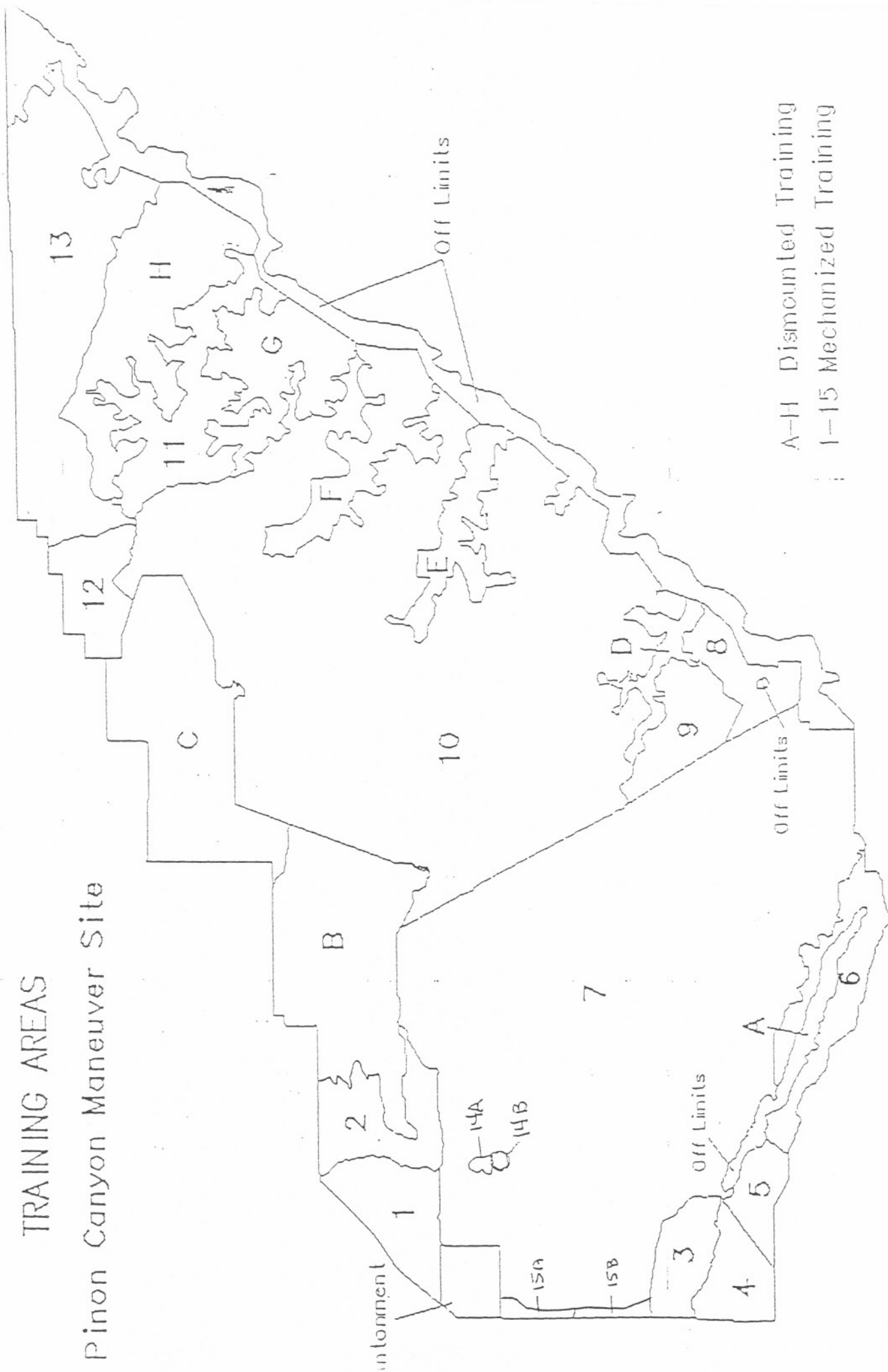
- IMPROVED MSR ROAD
- TRAINING AREA BOUNDARY
- INTERIOR FENCE
- HUNTING BOUNDARY FENCE

The map displays a topographic representation of the Pinon Canyon Maneuver Site. It features five designated training areas labeled A, B, C, D, and E. Area A is located in the lower-left quadrant, while areas B, C, D, and E are distributed across the upper and central portions of the map. The map includes a network of roads, with improved MSR roads shown as solid lines and other roads as dashed lines. Various boundary lines, including interior fences and hunting boundary fences, are indicated by different line styles. The terrain is depicted with contour lines, and several geographical features like canyons and ridges are labeled. A legend in the bottom-left corner defines the symbols used for roads, boundaries, and fences. A scale bar and north arrow are also present in the bottom-left corner.

A-1

TRAINING AREAS

Pinon Canyon Maneuver Site



A-H Dismounted Training
1-15 Mechanized Training

Appendix 3
Revise Rotational Scheme: PCMS

1. Twenty-three Training Areas: Mounted and Dismounted; 15 Areas. Dismounted Only; 8 Areas (A-H).
2. All areas rotated two years use/two years rest at a minimum.
 - a. Training mission orientation (direction) rotated for each exercise within the area.
 - b. Major crossing locations and secondary road network stabilized/improved where necessary to preclude resource degradation.
3. Two Major Mechanized Training Areas (7,10): Brigade Strength.
4. Two Secondary Mechanized Training Areas (11,13): Battalion Strength.
5. Ten Support Areas (1-6, 8-9, 12 and 15) [Brigade Support Area (BSA), Aviation, Communications and Small Unit Training].
 - a. Area 14 is designated for communication purposes only. Only one area (14A or 14B) may be utilized at any time for training in either areas 7 or 10 respectively.
 - b. Areas 1-6 and 15 will normally be utilized for training in area 7. However, mission requirements may necessitate limited utilization during training in area 10. Regardless of the designation, only one adjacent area will be in use at any time.
 - c. Areas 8,9 and 12 will normally be utilized for training in area 10. However, mission requirements may necessitate utilization during training in area 7. Regardless of the designation, only one adjacent are will be in use at any one time.
6. Wet weather deferment to continue as required and currently implemented.

Appendix 4

TRAINING UNIT PURE STRENGTH REQUIREMENTS

	Wheeled Vehicles	Tracked Vehicles	Personnel
Armor Company	3	14	56
Mechanized Inf. Co.	4	16	112
Light Inf. Co.	2	0	132
 Armor Battalion	 77	 96	 543
Mechanized Inf. Bn.	86	89	812
Light Inf. Bn.	35	0	560
 Armor Brigade	 243	 296	 1,720
Mech. Inf. Bde.	280	275	2,527
Light Inf. Bde.	115	0	1,797

FINDING OF NO SIGNIFICANT IMPACT

RESOURCE MANAGEMENT PROGRAM MODIFICATION, PINON
CANYON MANEUVER SITE (PCMS), COLORADO

Commander, Headquarters Fort Carson and 4th Infantry Division
(Mechanized), ATTN: AFZC-FE-ENR, Fort Carson, Colorado 80913-
5023

Phone: (719) 579-4828/2752

1. To all interested agencies, groups and persons:

PROPOSED ACTIONS: The proposed actions consist of two parts.
These are:

a. To modify the existing training area alignment from five
(5) to twenty-three (23) distinct area subdivisions.

b. To change existing deferment period stipulations to
allow for restricted utilization of dismounted military training
during the existing deferment periods of 15 December - 15 January
and April - June annually and when areas are currently being
rested/rotated or otherwise deferred.

PURPOSE OF THE ACTION: These actions are proposed in order to
provide Fort Carson with the management flexibility necessary to
maximize the beneficial training utilization of the PCMS without
negatively impacting the quality of the environmental resource.

ALTERNATIVES CONSIDERED: Various alternatives were considered to
include the following:

a. No Action. Would result in a retention of existing
management schemes and utilization stipulations/restrictions as
related to timing of use, area rest and rotation and
availability; continued considered inadequate management
flexibility, decreased training site utilization below its
considered carrying capacity and potential increased training
costs relative accomplishment of these activities at a facility
remote from the PCMS.

b. Alternative Proposal Implementation.

(1) Various diverse area reorganization schemes were
tested during previous training rotations and determined to be
less than satisfactory from both management and training points
of view as related to both training mission and resource
conservation accomplishment.

(2) Various permutations for dismounted training during the existing deferment periods has no other alternative other than that of No Action. Implementation of this proposal would only be accomplished in total compliance with the operational stipulations identified within the text of the EA addressing this proposal.

c. Implement Proposed Actions.

(1) Implementation of the proposed area reorganization as identified within the EA for this action is considered as an internal management initiative resulting in improved management flexibility and increased control over how and where specific training activities are accomplished while retaining the original premise of resting/rotating areas to provide for continued resource conservation and availability.

(2) Implementation of the proposed dismounted training utilization during deferment periods would provide for training site availability during a period of time that it is not currently available, increased site utilization for training which is considered as significantly less resource consumptive/degrading and increased management flexibility relative accomplishment of these identified training initiatives.

ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION: The anticipated environmental impacts of the proposed actions are considered to include neither significantly positive nor negative affects.

It has been determined that this proposal would not constitute an action significantly affecting the quality of the environment. Accordingly the Commander, Fort Carson has decided not to prepare an Environmental Impact Statement (EIS) under the National Environmental Policy Act of 1969 (PL91-190). Reasons for the decision not to prepare such a statement are as follows:

- a. There will be no adverse impacts on threatened or endangered species or their critical habitats.
- b. The proposal will not adversely affect air or water quality nor increase current noise levels.
- c. The proposal will not significantly affect the social or economic structure of adjacent communities.
- d. The proposal will not significantly alter existing expenditures of available energy resources.
- e. The proposal will not adversely affect the environmental resource base on which the PCMS depends for the accomplishment of the military training mission or the continued stewardship of the public trust.

f. There will be no adverse impacts on significant historic properties or cultural resources.

2. An environmental review file containing pertinent environmental documents for the reasons why an EIS is not required is available for public examination, upon request at the below address. All requests should be directed to the telephone number listed above. All interested agencies, groups and individuals not in agreement with this decision are invited to submit written comments for consideration by the Commander, Fort Carson within 30 days after publication of this document. The proposed action will not be implemented prior to this date. Comments should be directed to:

Commander
HQ, Fort Carson & 4th Infantry Division (Mechanized)
ATTN: AFZC-FE-ENR
Fort Carson, Colorado 80913-5023